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09/975,955	10/15/2001	David A. Baldwin	58032.000006	9673

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Ensoport Internetworks
Suite 300
2401 Pennsylvania Ave, NW
Washington, DC 20037

EXAMINER

ZHONG, CHAD

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/975,955

Applicant(s)

BALDWIN, DAVID A.

Examiner

Chad Zhong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-3 are presented for examination.
2. It is noted that although the present application does contain line numbers in specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.
3. The use of the trademark ensoRAIS among others have been noted in this application (pg 7, line 27). It should be capitalized wherever it appears and be accompanied by the generic terminology. Appropriate correction is required.

Objections

4. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

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5 Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 3 is objected to as a improper multiple dependent claim, See also MPEP § 608.01(n),

“Infringement Test” for dependent claims. The test for a proper dependent claim is whether the dependent claim includes every limitation of the parent claim. The test is not whether the claims differ in scope. A proper dependent claim shall not conceivably be infringed by anything which would not also infringe the basic claim. Specifically, Claim 3 does not refer back in the alternative only, i.e. Claim 5. A gadget according to claim 3 and 4, further comprising --- is an example of improper multiple dependent claim.

6. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Specifically, “will be” is based on presumption rather than further limiting the claims, thus, the claim is improper dependent.

7. Figure 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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7. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specifically, references

US 6,122,756, US 5,862,312, US 5,202,980, US 6,128,277, US 5,361,347, US 5,841,775,

US 6,253,230, US 6,141,759

are not currently submitted as part of the IDS

8. Claim 1 is objected to because of the following informalities: parenthesis with further defining claim elements, i.e. (memory, CPU, disk). Appropriate correction is required.

9. Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of US filed applications in the specification should also be updated where appropriate.

10. A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because portion of the specification is missing, the specification stopped after page 9, additional information is needed to have proper support for the claims.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed

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before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

There is no where in the specification that teaches how to do claim 1 and 2, as well as claim 3 is in consequence of claims 1 and 2, appropriate correction to the specification is required to overcome the enablement rejection.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 1-3 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

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The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

15. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

16. The term "significantly" in claim 3 is a relative term which renders the claim indefinite. The term "significantly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

17. Claims 1, 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following terms lack antecedent basis:

- i. the exact software image - claim 1, line 13.
- ii. the least loaded - claim 2, line 26.
- iii. the hardware devices - claim 2, line 32.

b. The claim language in the following claims is not clearly understood, rendering the claims indefinite:

- i. As per claim 2, line 31-32, it is not clearly understood whether "a full level of quality assurance testing" refers to "a full level of quality assurance testing" in claim 2, lines 29-30 (i.e. if they are the same, the word such as "said" or "the" must be used);

Claim Analysis

19 The examiner will interpret claim 1 as follows, configuration of VLAN to have plurality of service zones, each zone having separate traffic flow; router access list to provide protection across the VLAN traffic mentioned above; a plurality of redundant inexpensive server machines with same configurations, storing software images of other servers and share said images with other machines on the network.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aziz, US 2003/0154279, in view of Aziz (hereinafter Aziz_b), US 6,779,016, in further view of 'Ten Minute LDAP Tutorial', Orelly, 2001 (hereinafter Orelly).

22. As per claim 1, Aziz teaches:

a method for creating a well-defined architecture that combines configurations at the network, server and storage tier of an infrastructure in order to provide for scalability of services incrementally, increased performance, and enhanced security made up of the following configuration tasks:

(a) Configuring several Virtual Local Area Network (VLAN) segments in order to separate traffic from server to disk, from content switch to server, from user or WAN connected Ethernet segment to content switch (pg 4-5, [0082-0083], wherein database 131 contains VLAN configurations, and messages instruct the hardware abstraction layer how to place CPUs of the computing grid in particular VLANs, another words, different network hardware are assigned to different VLANs);

(b) Configuration of router access lists such that traffic is protected across the above mentioned VLAN segments ([0025], [0082], where the gateway routes information storage and retrieval requests; Table 8A, 8B, wherein the router access list is controlled by firewall, furthermore, routing information protocol is one of plurality of protocols configurable by the firewall).

(c) Configuration of many redundant inexpensive server machines ([0089-0094], adding/removing servers from lists, load balancing the servers, wherein the IDCs can be configured in similar fashion with each other, user can define same amount/type of computer elements, firewalls, load balancers etc.);

(d) Above mentioned machines are configured exactly the same (memory, CPU, disk) ([0087]; [0094], instant data centers can be created with the use of the editor, another words, hardware devices with identical configuration can be grouped together within the same load balancing server tier; a blueprint ('DNA') for creating any number of other IDCs that have the same structure);

(e) Each server contains the exact software image of all other servers and machine dependent configurations are stored in database (pg 7, [0106-0108], service provider 126 loads software image onto any particular IDC for access);

(f) Configuration of Network File System (NFS) such that machines can share storage and file locking is managed via NFS ([0224], table 8B, 8C, wherein the storage and the images within the storage are accessible with the proper authentication rights, thus the NFS performs the sharing and the locking aspects);

(g) This storage is configured in a Redundant Array of Inexpensive Disk (RAID) configuration ([0271]).

Aziz does not explicitly teach (a) storing of images and configurations within LDAP, (b) Network Attached Storage (NAS) technology

However, Orelly teaches storing of images and configuration within the LDAP server (Orelly, Fig B-1, wherein each entry is unique and directories are independent). It would have been obvious to one of

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ordinary skill in this art at the time of invention was made to incorporate Orelly with Aziz because the combination would improve the scalability for Aziz's system by running directly over existing TCP/IP and SSL protocols, moreover, it would improve the uniqueness of each entry, allowing for multiple independent entries easily identifiable upon retrieval. Aziz_b discloses NAS technology (Aziz_b, Col. 3, lines 8-12, lines 18-24; Col. 12, lines 50-55; Col. 7, lines 60-67; Col. 6, lines 1-13, for the advantages of compatibility). It would have been obvious to one of ordinary skill in this art at the time of invention was made to incorporate Aziz_b with Aziz because the combination would improve the compatibility and security for Aziz's system by extending the sharing of resources over the communications network (Aziz_b, Col. 12, lines 50-57).

23. As per claim 2, Aziz, Orelly, Aziz_b disclose the invention substantially as rejected in claim 1 above, including:

(a) Each server mentioned in claim 1 will have an exact copy of the complete software grouping (Aziz, [0094-0095]; [0106-0108]);

(b) The software grouping consists of an Email MTA, Web-based email front-end, POP daemon, Chat daemon, Web daemon, backup server software, monitoring daemon and agents, Web-based content portal, and additional software as it becomes useful to users of service providerships (Aziz, [0110], [0111], table 8b, [0271], [0274], [0110]);

(c) Users of the system will be directed to the least loaded and most available server by way of a content switch (Aziz, [0183], [0260], [0237], load balancer achieves this purpose);

(d) Any server will be able to handle the user request for service or software application (Aziz, [0107]; [0260], [0237], in a distributed load balancing system, any server within the load balancing group is able to handle client requests);

(e) Software can be added to the grouping at any time after it has been through a full level of quality assurance testing (Aziz, [0095]; [0101]; [0115], wherein the new software modules can be added to the

servers after a test such as the stress testing);

(f) After new software, bug fixes or security updates have been through a full level of quality assurance testing, they can automatically be pushed to the hardware devices within the architecture defined by claim 1 (Aziz, [0095]).

Aziz does not explicitly teach:

(b) IMAP daemon

(g) A Lightweight Directory Access Protocol (LDAP) configuration database will store any independent server configurations that will identify slight differences in the software.

(h) Above mentioned LDAP configuration database will not impact the software grouping at all, but will serve to extend the grouping.

However, Official Notice is taken (see MPEP 2144.03) IMAP daemon is well known and routinely used for electronic mail purposes at the time of the invention was made. It would have been obvious to the person of ordinary skill in the art at the time of the invention to have included IMAP daemon with Aziz because doing so would improve the capability of Aziz by allowing for another form of electronic mail protocol to work with the POP protocol, furthermore, Using IMAP an email client program can not only retrieve email but can also manipulate message stored on the server, without having to actually retrieve the messages. So messages can be deleted, have their status changed, multiple mail boxes can be managed.

Orelly teaches:

(g) A Lightweight Directory Access Protocol (LDAP) configuration database will store any independent server configurations that will identify slight differences in the software (Orelly, Fig B-1, wherein the global naming model ensures unique entries within the LDAP).

(h) Above mentioned LDAP configuration database will not impact the software grouping at all, but will serve to extend the grouping (Orelly, Fig B-1, as names and attributes are added to the LDAP

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database, there would not be any conflicts because the entries are unique and scalability would be improved as well as the database support increases to additional entries).

24. As per claim 3, Aziz, Orelly, Aziz_b disclose the invention substantially as rejected in claim 1 above, including:

the methods in claims 1 and 2 will significantly decrease cost, increase scalability, increase redundancy and enhance security (Aziz, [0077]; [0095]; [0105]).

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents and publications are cited to further show the state of the art with respect to

“ENSOBOX CLUSTERED SERVICES ARCHITECTURE: TECHNIQUES FOR ENABLING THE CREATION OF SCALABLE, ROBUST, AND INDUSTRIAL STRENGTH INTERNET SERVICES PROVIDER APPLIANCE”.

- | | | |
|------|-----------------|----------------------------|
| i. | US 2002/0103889 | Markson et al. |
| ii. | US 6421711 | Blumenau; Steven M. et al. |
| iii. | US 6212559 | Bixler et al. |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (571)272-3946. The examiner can normally be reached on M-F 7:15 to 4:30.

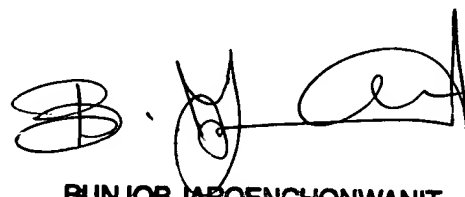
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAROENCHONWANIT, BUNJOB can be reached on (571)272-3913. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CZ

November 21, 2005

A handwritten signature in black ink, consisting of stylized, cursive letters that appear to read 'B. Jaroenchonwanit'.

BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER